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DATA
SUMMARY
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This Data Summary is one of a series of leading cause of death reports.

Highlights

- **Total years of potential life lost before age 75 increased 2.9 percent from 2000 to 2001 for California residents.**
- **The largest decline in premature mortality from 2000 to 2001 was in sudden infant death syndrome, a decrease of 11.3 percent.**
- **The largest increase in premature mortality from 2000 to 2001 was in homicide, an increase of 10.6 percent.**

Premature Mortality in California, 2001

By Daniel H. Cox

Introduction

Years of potential life lost before age 75 (YPLL-75) is one of the commonly used measures in public health to reflect the impact of premature mortality on a population.¹ This report summarizes 2001 California mortality data for selected causes of death contributing to premature mortality as measured by YPLL-75, and compares 2001 data with 2000 data. Beginning in 1999, cause of death is reported using the Tenth Revision of the International Classification of Diseases (ICD-10). Prior to 1999, premature mortality reports were based on the Ninth Revision of the International Classification of Diseases (ICD-9); therefore no direct comparisons should be made between this report and reports containing data earlier than 1999.

YPLL-75 reflects the impact of deaths occurring before the age of 75; the younger the decedent the greater the measured impact. An example would be a 29-year-old woman who dies from Human Immunodeficiency Virus Disease (HIVD). This event would be counted as 46 years of potential life lost. A 73-year-old man who dies from Chronic Lower Respiratory Disease (CLRD) would be counted as two years of potential life lost.

The causes of death selected for this report were chosen for their impact on premature mortality in California rather than for the number of deaths or the death rate attributed to each specific cause. Therefore, some of the causes of death reported here are different than what is traditionally presented in other Center for Health Statistics Data Summaries.

Premature Mortality Data

Total YPLL-75 for California residents increased 2.9 percent from 2000 to 2001. During this time, YPLL-75 declined for 4 of the 14 selected causes of death and increased for 10 (**Table 1**, page 3). Premature mortality declined for sudden infant death syndrome (-11.3 percent), influenza and pneumonia (-10.1 percent), and cerebrovascular diseases (-3.6 percent). A slight decrease was seen in conditions originating in the perinatal period (-0.1 percent).

¹ National Center for Health Statistics. Health, United States, 2003 with Chartbook on Trends in the Health of Americans; DHHS Publication Number 2003-1232, September 2003.

For more data, see DHS Center for Health Statistics, Home Page at www.dhs.ca.gov/org/hisp/chs/chsindex.htm

The largest increase in premature mortality from 2000 to 2001 was seen in homicide (+10.6 percent). Premature mortality also increased for suicide (+6.1 percent), unintentional injuries (+5.9 percent), diabetes mellitus (+4.5 percent), and CLRD (+3.1 percent). A smaller increase was seen in malignant neoplasms (+2.6 percent), chronic liver disease and cirrhosis (+2.5 percent), HIVD (+2.4 percent), congenital malformations (+2.2 percent), and diseases of heart (+0.9 percent).

As shown in **Table 2** (page 3), malignant neoplasms (cancers) accounted for a total of 30,144 deaths, representing 436,435 (21.9 percent) of the total YPLL-75 for California residents during 2001. Deaths attributed to diseases of heart (21,591) ranked second in 2001 and accounted for 288,467 (14.5 percent) of the total YPLL-75. Unintentional injuries occupied the third rank and accounted for 7,574 deaths and a YPLL-75 of 272,552 (13.7 percent of the total). Conditions originating in the perinatal period was ranked fourth and accounted for 1,371 deaths and 102,522 (5.1 percent) of the total YPLL-75. The low number of deaths and high YPLL-75 for unintentional injuries and conditions originating in the perinatal period shows the greater impact these two causes of death have on younger California residents. This is in contrast to malignant neoplasms and diseases of heart, the first and second ranked causes of death, which affect older Californians at higher rates.

In 2001, Homicide ranked as the fifth leading cause of premature mortality, accounting for 100,270 (5.0 percent) of the total YPLL-75 and 2,255 deaths. Suicide ranked sixth and accounted for an additional 92,120 (4.6 percent of the total) YPLL-75 and 2,864 deaths. Congenital malformations ranked seventh and resulted in 76,414 (3.8 percent) of the total YPLL-75 and 1,255 deaths. Deaths due to chronic liver disease and cirrhosis ranked eighth, accounting for 65,258 (3.3 percent) YPLL-75 and 3,236 deaths. Cerebrovascular diseases ranked ninth and accounted for 58,701 (2.9 percent) YPLL-75 and 4,513 deaths.

As shown in **Table 2** (page 3), CLRD ranked as the tenth leading cause of premature mortality, accounting for 48,122 (2.4 percent) of the total 2001 YPLL-75 and was the underlying cause of 4,603 deaths. HIVD ranked eleventh and accounted for an additional 46,056 (2.3 percent of the total) YPLL-75 and 1,479 deaths. Diabetes mellitus ranked twelfth and resulted in 45,562 (2.3 percent) of the total YPLL-75 and 3,343 deaths. Deaths due to influenza and pneumonia ranked thirteenth, accounting for 21,282 (1.1 percent) YPLL-75 and 1,513 deaths. Sudden infant death syndrome ranked fourteenth and accounted for 14,775 (0.7 percent) YPLL-75 and 197 deaths.

Comprehensive reports for many of the cause of death categories presented here are available from the California Center for Health Statistics.

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TABLE 1
ESTIMATED YEARS OF POTENTIAL LIFE LOST BEFORE AGE 75 (YPLL-75)
BY SELECTED CAUSES OF DEATH, CALIFORNIA 2000 and 2001
(By Place of Residence)

SELECTED CAUSES OF DEATH	ICD-10 CODES	2000 YPLL-75	2001 YPLL-75	NUMERIC DIFFERENCE	PERCENT CHANGE
TOTAL		1,936,423	1,993,191	56,768	2.9
Malignant Neoplasms	C00-C97	425,573	436,435	10,862	2.6
Diseases of Heart	I00-I09,I11,I13,I20-I51	285,846	288,467	2,621	0.9
Unintentional Injuries	V01-X59,Y85-Y86	257,482	272,552	15,070	5.9
Conditions Originating In The Perinatal Period	P00-P96	102,636	102,522	-114	-0.1
Homicide	X85-Y09,Y87.1	90,673	100,270	9,597	10.6
Suicide	X60-X84,Y87.0	86,860	92,120	5,260	6.1
Congenital Malformations	Q00-Q99	74,781	76,414	1,633	2.2
Chronic Liver Disease and Cirrhosis	K70,K73-K74	63,674	65,258	1,584	2.5
Cerebrovascular Diseases	I60-I69	60,862	58,701	-2,161	-3.6
Chronic Lower Respiratory Diseases	J40-J47	46,678	48,122	1,444	3.1
Human Immunodeficiency Virus Disease	B20-B24	44,955	46,056	1,101	2.4
Diabetes Mellitus	E10-E14	43,589	45,562	1,973	4.5
Influenza and Pneumonia	J10-J18	23,676	21,282	-2,394	-10.1
Sudden Infant Death Syndrome	R95	16,650	14,775	-1,875	-11.3
All Other Causes	Residual	312,488	324,655		

Source : State of California, Department of Health Services, Death Records.

TABLE 2
DEATHS, RATES AND ESTIMATED YEARS OF POTENTIAL LIFE LOST BEFORE AGE 75 (YPLL-75)
BY SELECTED CAUSES OF DEATH, CALIFORNIA 2001
(By Place of Residence)

SELECTED CAUSES OF DEATH	ICD-10 CODES	DEATHS	RATE*	YPLL-75	RANK
TOTAL		101,536	303.7	1,993,191	
Malignant Neoplasms	C00-C97	30,144	90.2	436,435	1
Diseases of Heart	I00-I09,I11,I13,I20-I51	21,591	64.6	288,467	2
Unintentional Injuries	V01-X59,Y85-Y86	7,574	22.7	272,552	3
Conditions Originating In The Perinatal Period	P00-P96	1,371	4.1	102,522	4
Homicide	X85-Y09,Y87.1	2,255	6.7	100,270	5
Suicide	X60-X84,Y87.0	2,864	8.6	92,120	6
Congenital Malformations	Q00-Q99	1,255	3.8	76,414	7
Chronic Liver Disease and Cirrhosis	K70,K73-K74	3,236	9.7	65,258	8
Cerebrovascular Diseases	I60-I69	4,513	13.5	58,701	9
Chronic Lower Respiratory Diseases	J40-J47	4,603	13.8	48,122	10
Human Immunodeficiency Virus Disease	B20-B24	1,479	4.4	46,056	11
Diabetes Mellitus	E10-E14	3,343	10.0	45,562	12
Influenza and Pneumonia	J10-J18	1,513	4.5	21,282	13
Sudden Infant Death Syndrome	R95	197	0.6	14,775	14
All Other Causes	Residual	15,598	46.7	324,655	

* Cause-specific death rates are per 100,000 population under age 75 (n=33,427,612).

Source : State of California, Department of Finance; 2001 Population: Population Projections by Age, Race/Ethnicity and Sex, December 1998.
State of California, Department of Health Services, Death Records.